

## **REMARKS**

### **I. INTRODUCTION**

Claim 1 has been amended to more particularly point out and distinctly claim the subject matter of the present invention. No new matter has been added. Thus, claims 1-22 are pending in the present application. In view of the following remarks, it is respectfully submitted that all of the presently pending claims are allowable.

The Examiner rejected claims 1-3 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,122,757 to Kelley (hereinafter "Kelley"). (8/17/04 *Office Action*, ¶¶ 2-5, pp. 2-3). The Examiner also rejected claims 4-8 under 35 U.S.C. 103(a) as being unpatentable over Kelley. (8/17/04 *Office Action*, ¶¶ 7-8, p. 4). Finally, the Examiner rejected claims 9-22 under 35 U.S.C. 103(a) as being unpatentable over Kelley in view of U.S. Patent No. 6,411,992 to Srinivasan et al. (hereinafter "Srinivasan"). (8/17/04 *Office Action*, ¶¶ 9-11, p. 5).

### **II. THE 35 U.S.C. § 102(e) REJECTIONS SHOULD BE WITHDRAWN**

The Examiner rejected claims 1-3 as being anticipated by Kelley. Kelley provides an improved system of generating code to match patterns in a protocol analyzer. (*See Kelley*, Abstract). Pattern matching is a technique used to examine the data portion of individual frames that pass along a communication link between first and second devices. (*See Kelley*, Col. 1, ll. 23-26). In other words, the frames received by the second device are compared to pre-existing patterns stored in the second device. This technique may be used to trigger predetermined events, capture frames, filter specific frames, or identify frame errors. (*See Kelley*, Col. 2, ll. 33-41). Kelley purports to improve upon the brute force system of word-by-word

comparison of a pattern against input data because the brute force system necessarily results in the “worst case” number of comparisons. (*See Kelley*, Col. 1, ll. 50-67). Acknowledging that some patterns may be subsets of others, Kelley groups sets of patterns by relationship type and generates a hierarchy of code which eliminates particular types of patterns, which cannot possibly match, from the comparison process. (*See Kelley*, Col. 2, l. 51 – Col. 3, l. 1).

The present application describes a comparison method for selecting particular audio elements (e.g., musical selection, news report, sports score, reminder, etc.) for an individual user based upon that user’s profile. (*See Specification*, p. 34, ll. 8-9). Incorporated are a set of data structures in a user profile database and an audio element database, each data structure being representative of information in its respective database, and a software routine for comparing properties represented by the data structures. (*See Specification*, p. 34, ll. 27-30). Information related to demographic properties and properties of audio elements is trinary. (*See Specification*, p. 35, ll. 4-6). For example, for the demographic property of whether the sex of a user is male, the indicative value could be either true, false, or unknown. (*See Specification*, p. 35, ll. 6-13). Because each audio element is a candidate for inclusion in the user’s customized broadcast, each element must be tested to determine whether the user is in its target audience. (*See Specification*, p. 35, ll. 20-23). To efficiently perform this testing, demographic properties and properties of audio elements are each stored in a pair of words which can then be compared in parallel by direct operations on the words. (*See Specification*, p. 36, ll. 1-11).

Contrary to the Examiner’s contentions, the recitations of claim 1 of the present application differ significantly from the disclosures of Kelley. A notable distinction inheres in the structures which are being compared in each matching process. Specifically, Kelley

compares information transmitted over a communications link with a pattern pre-existing in the target device. Conversely, claim 1 recites “*creating*” a first, second, third, and fourth data structures. Although Kelley mentions that a pattern may be created by a user, this pattern constitutes only a portion of the data to be compared since the other object of comparison is received from another device. Therefore, Kelley does not teach or suggest “creating” four separate data structures as recited in claim 1.

Claim 1 is also distinct from Kelley with respect to the objective and results. Kelley aims to determine whether a matching pattern exists, whereas the present invention, as recited in claim 1, aims to determine whether a first set of known properties “*are wanted as a target set of properties.*” The mere existence of a matching pattern is by no means equivalent of a determination that one set of properties is desired by another.

Despite the above described distinctions, claim 1 has been amended to recite the additional step of “storing the audio element into a cache memory upon determining that said first set of known properties are wanted as the target set of properties.” Kelley fails to teach or suggest any such storage conditioned upon the results of the comparing step.

For at least the reasons discussed above, it is respectfully submitted that the rejection of claim 1 be withdrawn. Because claims 2-3 depend from and therefore include all the limitations of claim 1, it is respectfully requested that the §102(e) rejection of these claims be withdrawn as well.

### **III. THE 35 U.S.C. § 103(a) REJECTIONS SHOULD BE WITHDRAWN**

The Examiner rejected claims 4-8 under 35 U.S.C. § 103(a) as unpatentable over Kelley, as applied to claims 1-3. While acknowledging that Kelley does not teach the length of the first, second, third, and fourth data structures, the Examiner contends that it would have been obvious to one skilled in the art to dynamically pack logical states in accordance with the length of computer words because Kelley teaches an objective of minimizing the number of pattern matching comparisons. (*See 8/17/04 Office Action*, ¶ 8, p. 4).

Claims 4-8 are dependent upon and therefore include all of the limitations of claim 1. As discussed above, Kelley fails to teach or suggest all of the limitations included in claim 1. Accordingly, for at least the reasons discussed above, it is respectfully submitted that the rejection of claims 4-8 should also be withdrawn.

The Examiner rejected claims 9-22 under 35 U.S.C. § 103(a) as unpatentable over Kelley in view of Srinivasan. The Examiner acknowledges that Kelley does not disclose wherein the comparison result is used for determining whether an audio element should be transmitted to a remote listener. (*See 8/17/04 Office Action*, ¶ 10, p. 5). However, the Examiner asserts that these deficiencies are cured by Srinivasan. (*See id.*).

Srinivasan describes a method and system for broadcasting advertisements over a data network. (*See Srinivasan*, Abstract). A series of tables respectively contain information regarding descriptions of the programs being broadcast, the times when commercial breaks occur, the identification number assigned to each commercial, and information relating to system users. (*See Srinivasan*, Col. 7, l. 54 – Col. 8, l. 65). Another table is used to associate program identifications with associated commercial breaks. (*See Srinivasan*, Col. 8, ll. 32-40). When a

commercial break in a program is reached, these tables are accessed in order to broadcast commercials to individual users based on their particular demographic information. (*See Srinivasan*, Col. 9, ll. 10-34).

The Examiner asserts that it would have been obvious to one of ordinary skill in the art to apply the matching technique described in Kelley with the advertisement broadcasting system of Srinivasan. (*See 8/17/04 Office Action*, ¶ 10, p. 5). However, Applicants note that Kelley and Srinivasan relate to completely separate and dissimilar subject matter. Accordingly, there is no motivation to combine these references, and such combination would not have been obvious to one of ordinary skill in the art at the time of filing the present application.

Further, Srinivasan fails to cure the defects of Kelley. Claim 9 of the present application inherently includes an analysis “to *determine whether the audio element should be transmitted* to the remote listener.” In contrast, Srinivasan merely describes a process whereby commercials are pulled off tables indicating a potentially corresponding demographic. In other words, a predetermined relationship between the commercials and the demographic are stored in these tables, which facilitates selection of the individual advertisements to be broadcast. Therefore, Srinivasan fails to disclose wherein a determination whether to transmit an audio element is made.

Accordingly, Applicants respectfully submit that Kelley and Srinivasan, either alone or in combination, neither teach nor suggest using bit-wise binary operations on four data structures “to determine whether the audio element should be transmitted to the remote listener” as recited in claim 9. Thus, the Applicants respectfully request that the rejection of claim 9 be

withdrawn. Because claims 10-21 depend from and therefore include all the limitations of claim 9, it is respectfully submitted that the rejections of these claims should also be withdrawn.

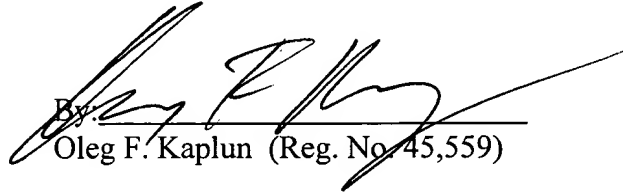
The Examiner rejected claim 22 for the same reason as the rejection of claims 1 and 9. (*See 8/17/04 Office Action*, ¶ 11, p. 5). Therefore, for at least the reasons discussed above with respect to claims 1 and 9, it is respectfully submitted that the rejection of claim 22 should also be withdrawn.

### CONCLUSION

In view of the amendments and remarks submitted above, Applicants respectfully submit that all claims pending in the present case are in condition for allowance. All issues raised by the Examiner have been addressed, and a favorable action on the merits is thus earnestly requested.

Respectfully submitted,

Dated: June 9, 2005

  
By: \_\_\_\_\_  
Oleg F. Kaplun (Reg. No. 45,559)

FAY KAPLUN & MARCIN, LLP  
150 Broadway, Suite 702  
New York, NY 10038  
(212) 619-6000 (phone)  
(212) 619-0276 (facsimile)